

An
Inaugural Dissertation
on

Pneumonic Inflammation.

Submitted for examination to the Medical Faculty
of the

University of Pennsylvania
by

Samuel Smith

of Pennsylvania.

Passed March 17th 1823

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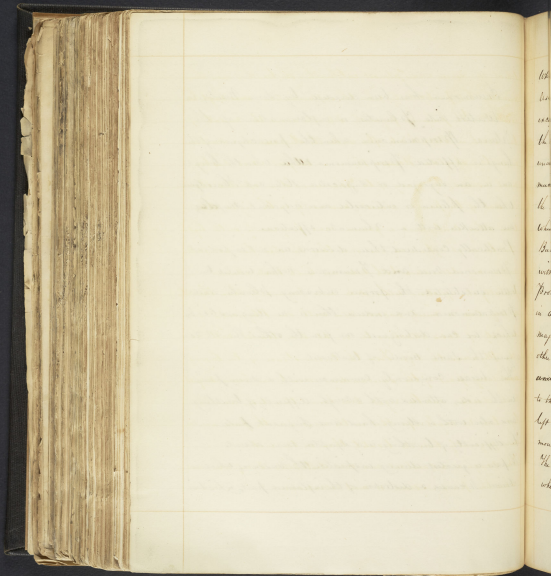
Pneumonia has been divided by some Nosological Writers into Pleuritis, or inflammation of the Pleura; Peripneumonia when the parenchyma of the lungs is affected; Peripneumonia *vetta* when the lungs are in an engorged or suppurated state; and Pleurodynia when the pleura or intercostal and adjacent muscles are attacked with a rheumatic affection.

Practically considered, these divisions are not important. Pneumonia vera and Pneumonia *vetta* would be better substituted the former embracing pleuritis and Peripneumonia; and indeed there is no diagnosis by which we can distinguish one from the other. The both require the same mode of treatment.

This disease commonly commences with a severe pain in the side, attended with a cough, difficulty of breathing, and also with a strong hard and frequent pulse.

The difficulty of breathing is a symptom never absent.

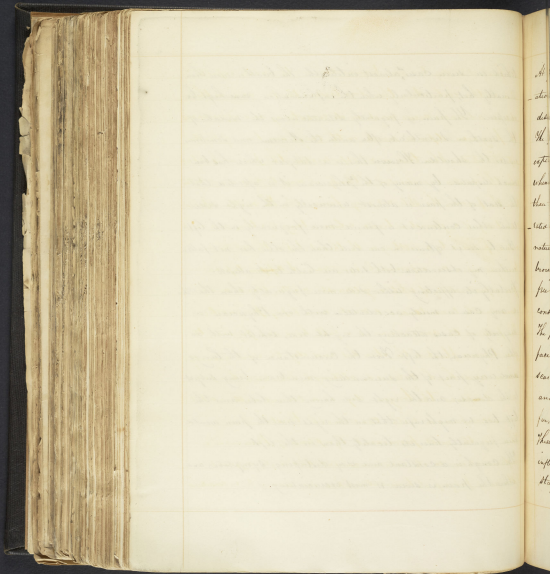
The pain is greatest during inspiration. The reason of which is obvious: It causes a distention of the inflamed parts, & friction



which in severe cases, almost entitles. The breath is more than usually hot, particularly when the inflammation ~~remains~~ ^{is} kept by exasperation. The pain is frequently situated about the middle of the scath, a seventh rib, often under the sternum, and sometimes under the shoulder. However this is a subject which has been much disputed: by many of the Physicians it is asserted that the seat of the pain is almost universally in the right side, while others contend it is found more frequently in the left. But to see it often in one side than the other has not fallen within my observation, both sides are liable to its attack.

Probably its affecting either side more frequently than the other in any case is merely accidental - with one Physician a majority of cases attacking the right side, whilst with another Physician, the left. From the Circumstances of the lungs and every part of the surrounding membrane being subject to the disease, and the right side having three lobes and the left two, we might infer that in the right side, the pain would more frequently have its locality than in the left.

The Cough is a constant and very distressing symptom, and where the pain is severe is most excruciating.



At first it is dry, but soon becomes hoarse, - the matter expecto-
- rated in this early stage, thin, soon becomes thicker; and as the
disease advances varies much in its consistency and appearance.
The prognosis depends much on the Cough and kind of matter
expectorated: - When there is no expectoration the prognosis is bad,
when the matter expectorated is bloody, it may be considered better
than the former, tho' still not very favourable. The matter expecto-
- rated being of a greenish or brown colour, or being of a thin, and acrid
nature, preceded by a rattling in the throat before the matter is
brought up, is an unfavourable symptom. A ~~cough~~ copious and
free expectoration of white or yellowish matter, bland and of
considerable consistence, is a much more happy prognostic.
The pulse at the commencement is full, hard and frequent; the
face becomes flushed, the skin hot and dry; the veins generally
scarcely and highly coloured, although sometimes lumped
and conspicuous; the tongue dry and covered with a white
fur, accompanied with considerable thirst.

These are the most prominent symptoms of Pneumonic
inflammation, in its commencement and in its different
stages of progress, its termination, which now deserves to be considered

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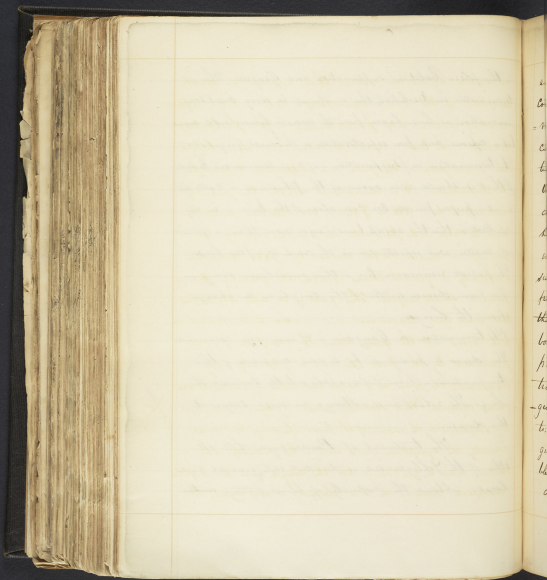
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is the following: Resolution, Suppuration and Gangrene. When it terminates in Resolution, this is almost in every case some evacuation; as hemorrhagia from the nose or hemorrhoidal bleed but a copious and free expectoration is the most frequent.

The termination in Suppuration is of rare occurrence. Indeed, I think it should never occur, if the physician is called in at a proper period. One case alone of this kind is in my recollection: that the abscess burst, and more than a quart of matter was expectorated in the course of a few hours. The patient recovered in two or three months and remains free from disease without either cough, or dis charge from the lungs.

The termination in Gangrene is of very rare occurrence. This disease is produced by sudden vicissitudes of the temperature, or from cold applied to the surface of the body. The robust and strong are most subject to this disease.

The treatment of Pneumoniae like all other of the Phlegmasiae is divided into general and local. About the propriety of blood letting, ~~with~~

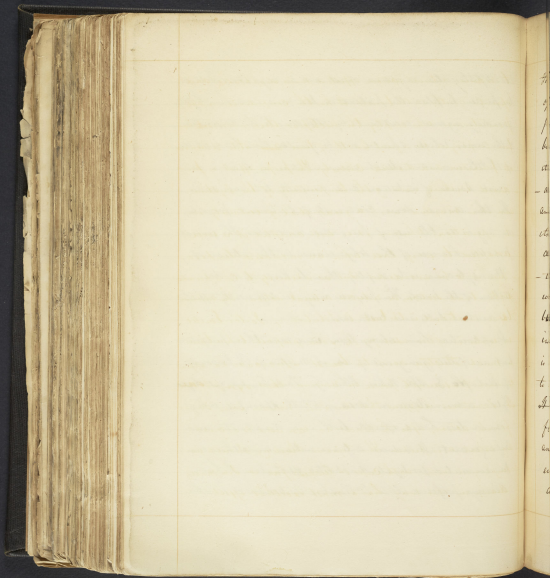


as a remedy in this disease, there appears no doubt.
Consulted in the commencement of a case of high infla-
-matory action, all practitioners in this particular,
concur. The best general direction is to draw blood
till a remission of the pain, or a disposition to syncope
be induced. It is immaterial whether the quantity
detached be XX or XXX, but attention must be
had to cause it to flow with all possible rapidity; the
impression made on the disease by XXX detached
suddenly is greater than double the quantity drawn
from a small orifice. This fact is so well established,
that some have recommended a vein to be opened in
both arms at the same time. The remission of pain
produced by the first bleeding is generally very
transient; the pain in a short time returning with its ori-
-ginal violence. No section must again be resorted
to: sometimes to the extent of the first bleeding; but most
generally the symptoms yield with a 4th quantity. The
bleeding may be continued till the cough and hard pulse
disappears. During the time bleeding is employed, the

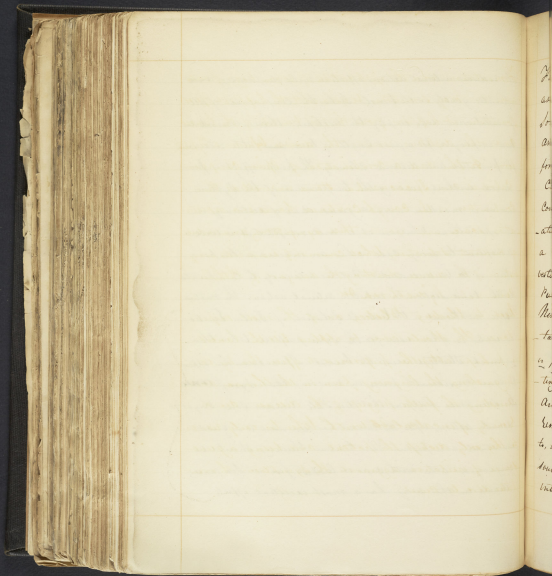
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Antiphlogistic regimen must not be neglected. It will be proper to place the patient in bed and cover him lightly, guarding against excitement by attending to the temperature of the room, which should not be greater than 65 or 65.5 of the thermometer. Much accumulation of heat is a great source of irritation and carefully to be avoided. In this disease, some contraindication of treatment prevails, as regards the use of purgative medicines. The general practice however of the Physicians, in the interior of Pennsylvania, is, to employ them to keep up a due action of the bowels. This purpose may be sufficiently effected by neutral Salts and Castor oil.

Diaphoretics have always been used more than purgatives, but are of late going out of use. A Mixture of R. Carbonate of Potash ℥i Spts Nitro Ether ℥i Part. Emulsi qd Aqua ℥vi administered in doses of a table spoonful every one or two hours, operates both as a diaphoretic and Refrigerant. It reduces arterial action more than can be accounted for by its diaphoretic effect alone. I have always preferred it to Dr Rush's Antiseptic Powder.



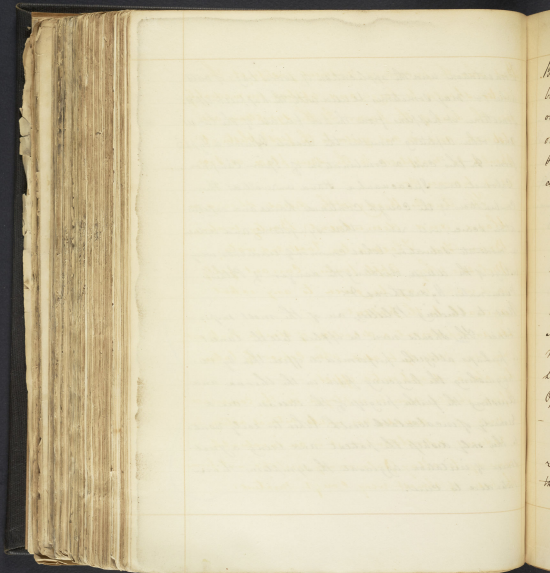
It reduces arterial action, effects a mild diarrhoea, and operates gently on the bowels. It has the confidence of all practitioners who employ the Aesculapian Accommodator, ~~has~~ been employed for a great length of time ~~and~~ still retaining its primitive and deserved celebrity. The proper effect is produced without raising the temperature of the system, and it is marked with a great deal of certainty in its operation; wherefore it is well adapted, it is well adapted to every case where an increased temperature is to be avoided. But as a remedy to co-operate with bleedings, in reducing arterial action, the mixture before mentioned is the best. A solution of Tartar Emetic in water is often used for the same purpose. When there is much thickening across the breast Succacana has appeared to have considerable power in removing that symptom. It sometimes happens, that there still remains some slight febrile action, after the lancet has been used to as great an extent as is proper. This topical bleeding should be employed either with cups or leeches: fire or sinusses drawn in this way has a most excellent effect.



Fomentations and the application of warm bags of oats
ashes &c may sometimes be used with the happiest effect.
Sometimes it happens from the too free use of the lancet
and other depleting remedies the disease assumes a typhoid
form. In this case a combination of Opium Camphor

Calomel and Speacavanha stand unrivalled. This
combination if the cough continues hard and expecto-
-ation scarce, will remove these symptoms and induce
a moderate salivation, which commonly eradicates every
vestige of the disease, obviating the danger of Pleurisy
Pulmonalis. Hydrathorax &c

Next to bleeding Blisters are of the most impor-
-tance. They should never be applied till the lancet
is perhaps altogether performed its office, then by ex-
-tinguishing the lingering pain in the thorax and
arresting the further progress of the disease are a
remedy of incalculable worth. When too early resorted
to, they only distress the patient and being a great
source of irritation aggravate the symptoms they were
intended to cure.



But when the preceding treatment justifies it, the blister should be large, and applied immediately over the seat of the pain. If the symptoms are obstinate and do not yield to the first blister it should be reappplied to the same place as soon as it becomes dry.

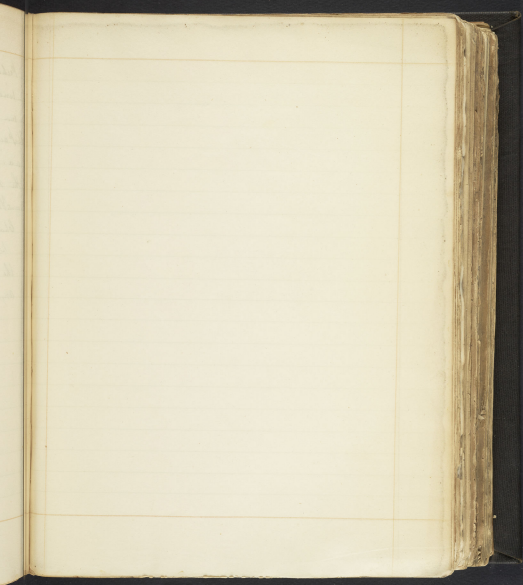
The Quinins throughout the disease should be bland and demulcent: Barley water, Bran Tea, Glassed tea, Toast and water, Molasses Whiy, Apple water, Currant jelly and water, may be given to any extent agreeable to the patient.

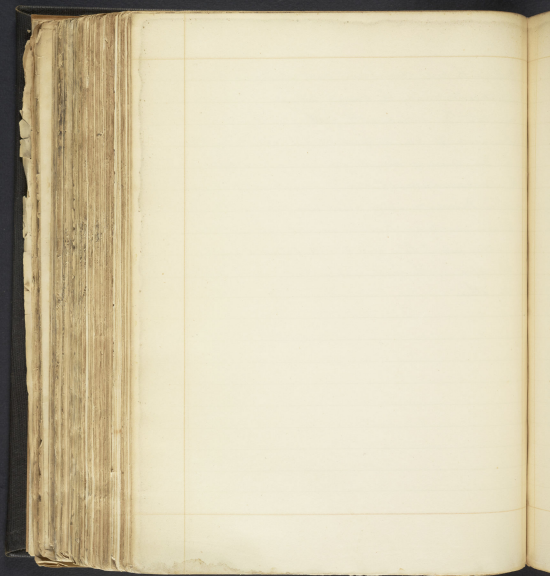
As an expectorant, a decoction of Seneka Snake-root may very properly be used, when copiously taken has also a diaphoretic effect.

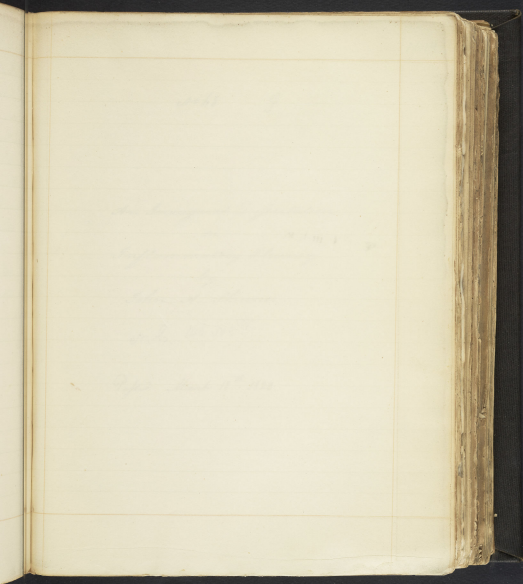
Opium should never be employed in the commencement of the disease; nor until arterial action be reduced, notwithstanding, it is an invaluable remedy to allay Pulmonary irritation - it forms the base of almost every Cough Mixture.

Perhaps the best demulcent and expectorant Com-
-bination to remedy the Cough consists of R. Spa-
-ma cete ℥ij rubbed in the yolk of an egg
Elispaugoric. ℥j. Vin. Antimoniac. ana Spts Nitro. Other
a a ℥ij And of Loaf Sugar enough to render
the mixture agreeable. Water ʒvi or a tall Spoon. which may
be used. The above mixture recommended by Dr.

Chapman may answer as well, and probably
better, but I have been so well satisfied with
the effect of the first, that I have rarely employ'd
any other.







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